REMARKS

As of the Final Rejection, claims 1, 2, 4-21, 25, 27-31, 33-49, 53, 55-59, 61-76, 80, 82-85, 87-102, 105, 107-109, and 114-120 are pending in the Application and stand rejected. With this response claims 31, 59, 114-117 are amended, while claims 1, 2, 4-21, 25, 27-30, 57-58, 83-85, 87-102, 105, and 107-109 are cancelled. Upon entry of the amendments, claims 31, 33-49, 53, 55-56, 59, 61-76, 80, 82, and 114-120 remain pending in the application.

Independent claims 1 and 85 and their dependent claims are cancelled to simplify issues. Claims 31, 59, 114, and 116-117 are amended to address a formal matter by omitting a recitation of dissolution profiles. Additionally, claim 115 is amended to correct an obvious typo. Claims 31 and 59 are also amended to address another § 112 issue. No new matter is added by amendments. Applicants respectfully request entry of the amendments.

CONSIDERATION AFTER A FINAL REJECTION

Consideration after a Final Rejection is proper because the amendments and remarks place the claims in an allowable condition and require no further examination and/or place the claims in better condition for appeal. Further and favorable action is urgently solicited. In the alternative, Applicants respectfully request an Advisory Action stating whether the amendments can be entered and/or the remarks considered at this time.

REJECTION UNDER 35 U.S.C. § 112

Claims 1, 2, 4-12, 19, 25-31, 33-40, 45-47, 53-59, 61-74, 80, 82-85, 87-100, 105-109, and 114 stand rejected under 35 U.S.C. § 112 as failing to comply with the written description requirement. Applicants maintain their position that the claims fully comply with the written description requirement because the specification makes it clear to a person of skill in the art that the Applicants were in possession of the invention now being claimed. However, to expedite prosecution, Applicants have amended claims 31, 59, 114, and 116-117 to delete the recitation of the dissolution profiles, which was apparently the cause of the rejection. In addition, cancellation of claims 1, 2, 4-12, 19, and 25-30 and of claims 85, 87-100, and 105-109 moots the rejection with respect to those claims. Accordingly, Applicants respectfully request that the rejection, as applied to the amended claims, be withdrawn.

The claims are also rejected as failing to comply with the written description requirement because claims 1, 31, 59, and 85 recite "3 to 25% by weight" whereas the specification recites

"from about 3% to about 25%" of the expanding agent. In response, Applicants have amended claims 31 and 59 to recite "about 3% to about 25%." The rejection is moot as to the cancelled independent claims 1 and 85.

Claim 27 is also rejected under § 112. Claim 27 has been cancelled, mooting the rejection. Applicants respectfully request the rejection be withdrawn.

On the basis of the claim amendments, Applicants respectfully request the rejection be withdrawn.

CLAIM OBJECTION

Applicants have amended claim 115 to address the informality noted in the Office Action. Applicants request the objection be removed.

REJECTIONS UNDER 35 U.S.C. § 103

Claims 1, 2, 4-21, 25, 27, 29-31, 33-49, 53, 55, 57-59, 61-76, 80, 83-85, 87-102, 105, 108, and 109 stand rejected as obvious over U.S. Pub. 2003/0021841A1, Matharu et al., issued January 30, 2003 (hereinafter "*Matharu*") in view of U.S. Pat. 6,592,900B1, Bühler et al., issued July 15, 2003 (hereinafter "*Bühler*") and in further view of U.S. Pat. 6,099,859, Cheng et al., issued August 8, 2000 (hereinafter "*Cheng*") and U.S. Pat. 5,472,712, Oshlack et al., issued December 5, 1995 (hereinafter "*Oshlack*"). Applicants respectfully traverse the rejection as applied to the amended claims and request reconsideration.

As a preliminary matter, Applicants note that claims 28, 82, and 107 are not considered obvious over the combined references. Applicants appreciate this consideration along with the finding that claims 28, 82, and 107 contain subject matter allowable over the references. Applicants urge that the rejected claims are patentable on the basis of the following discussion.

Novel claims are patentable over a combination of references unless the references when combined disclose all of the features recited in the claims and there is a motivation or apparent reason to select certain features from the individual references for combination. In selecting features of disparate references for combination to support an obviousness rejection, care must be taken lest impermissible hindsight creep into the analysis, wherein in effect Applicants' own description of the invention is used as a roadmap to combine the references. To guard against this tendency, it is axiomatic that the entire teaching of prior art references needs to be

considered, including any disclosures that tend to "teach away" from doing what Applicants have done. The rejections are now discussed with these principles in mind.

Basically, *Matharu* and *Bühler* are applied for their teachings of a core containing metformin while the secondary references *Cheng* and *Oshlack* are used for their disclosures of coatings. Applicants believe that insufficient weight has been given to portions of the disclosures of *Matharu* in particular that teach away from the subject matter of the rejected claims.

The rejected claims recite cores containing 70% or greater by weight of metformin and 3 to 25% by weight of a "non-hydrocolloid expanding agent." In combination with the coatings permeable to metformin, the cores make-up extended release tablets that release metformin in desirable dissolution profiles. In contrast, *Matharu* teaches that the poorly compressible pharmaceutical agent (e.g., metformin) is preferably present in the tablet at 30% to 70% by weight (*see* paragraph [0013]). Taken as a whole, this is a teaching away from providing metformin cores having metformin in the range recited in the claim.

Likewise, the rejected claims recite that the cores contain 3 to 25% by weight of a non-hydrocolloid expanding agent. Relevant to this element, *Matharu* teaches that a "hydrophilic erodible component" is preferably present in an amount from 30 to 70% by weight (*see* paragraph [0014]). This range of teaching is outside the range recited in the rejected claims and demonstrates another "teaching away" from doing what the inventors have done.

To arrive at the claimed cores from the references, the person of skill in the art would have to select respective levels of both metformin and of non-hydrocolloid that are outside the ranges taught as "preferred" by *Matharu*. The references thus fail to suggest specifically the cores recited in the rejected claims.

Cheng and *Oshlack* are cited for their disclosure of coatings. Given the deficiencies of *Matharu* described above with respect to the core, Applicants respectfully submit that, even if the teachings of *Cheng* and *Oshlack* with respect to coatings are combined with *Matharu*, the resulting combination is still not the subject matter of the rejected claims. The secondary references provide no motivation to change the teaching away by *Matharu* from using metformin and an expanding agent at the levels recited in the rejected claims.

For these reasons, Applicants respectfully request the rejection be withdrawn.

In further view of Cheng and Moeckel

Claims 1, 2, 4-9, 11-13, 15, 17-19, 27-31, 33-37, 39-41, 43, 45-47, 55-59, 61-64, 66-68, 70, 72-74, 82-85, 87-90, 92-94, 96, 98-100, 107-109, and 114-120 are rejected as obvious over *Matharu* and *Bühler* and in further view of U.S. Pat. 5,955,106, Moeckel et al., issued September 21, 1999 (hereinafter "*Moeckel*") and *Cheng*. Applicants respectfully traverse the rejection as applied to the amended claims and request reconsideration.

As an initial matter, the rejection is moot with respect to claims 1-30 and 85-109, as those claims have been cancelled. It is also appreciated that the following claims do not fall under the rejection: claims 10, 14, 16, 20-21, 25, 38, 42, 44, 48-49, 53, 65, 69, 70, 75, 76, and 80. Applicants urge removal of the rejection against the remaining claims for the following reasons.

The deficiencies of *Matharu* and *Bühler* with respect to the core recited in the claims are discussed above. Applicants respectfully submit that *Cheng* and *Moekel* applied here do not overcome those deficiencies. For this reason, Applicants believe the claims are patentable and urge the rejection be withdrawn.

The rejection should also be withdrawn because *Cheng* and *Moekel* in fact teach away from doing what Applicants have done, even in addition to the teaching away of *Matharu* and *Bühler* discussed above. As discussed by Applicants in earlier prosecution, *Moekel* teaches that its cores must contain a retardant. This teaches away from using 3 to 25% by weight of an expanding agent as recited in the claims. Similarly, *Cheng* teaches that its coatings must be "impermeable" to metformin. This teaches away from the subject matter of the rejected claims, where Applicants recite that the coating is permeable to metformin. Reconsideration is requested in light of the following discussion.

Moekel teaches its cores must retain a retardant to overcome disadvantages of prior art metformin tablets. As illustration, the following excerpts from *Moekel* are repeated here from page 21 of Applicants' May 14, 2009 Amendment (emphasis added throughout):

> The object of the invention was to provide an improved pharmaceutical composition for the active substance metformin. In particular the form of administration should contain the active substance metformin with a highest possible content of active substance and a retardant, the retardant causing a controlled release of the active substance. *Col. 1, lines 33-38*
>
> In the present case the object of the invention is achieved by providing high-dose pharmaceutical compositions containing metformin

> which contain a hydrocolloid-forming agent as a retardant . . . *Col. 2, lines 17-20*
>
> In addition it surprisingly turned out that the use of a hydrocolloid-forming agent enabled for the first time the known poor compressibility of metformin to be brought under control in a technically satisfactory manner. *Col. 2, lines 58-61*
>
> Within the sense of the invention the standard hydrophilic gel forming agents are suitable as hydrocolloid-forming agents or as hydrophilic swelling substances such as for example cellulose derivatives, dextrins, starch, carbohydrate-based polymers, natural or hydrophilic gums, xanthanes, alginates, gelatin, polyacrylic acid, polyvinyl alcohol or polyvinylpyrrolidone. In the case of the cellulose derivatives the alkyl or hydroxyalkyl cellulose derivatives preferably come into consideration such as e.g. methyl cellulose, hydroxymethyl cellulose, hydroxyethyl cellulose, hydroxypropyl cellulose, methylhydroxyethyl cellulose, methylhydroxypropyl cellulose or sodium carboxymethyl cellulose. *Col. 3, lines 20-33*
>
> The use of hydrocolloid-forming agents as retardants is based on the property of the hydrocolloid-forming agents to swell and form a gel matrix when they are contacted with a release medium or digestive juices which erodes to release the active substance. *Col. 3, lines 41-45*

As discussed in the May 2009 Amendment, the passages establish that the *Moekel* cores are required to have a component that retards release of the metformin, while the current claims recite cores that contain an expanding agent. Because the expanding agents of the claims tend to act as disintegrants, whereas the hydrocolloid forming agents of *Moekel* act as a retardant to disintegration, the reference actually teaches away from the subject matter of the claims.

Cheng also teaches away by insisting that its coatings be impermeable to metformin, while the rejected claims recite cores permeable to metformin. As further noted in the May 2009 Amendment, column 4, lines 10-16 of the Cheng reference states:

> The homogenous core is coated with a semi-permeable membrane, preferably a modified polymeric membrane to form the controlled release tablet of the invention. The semi-permeable membrane is permeable to the passage of an external fluid such as water and a biological fluid and is impermeable to the passage of the anti-hyperglycemic drug in the core.

As discussed in the earlier amendment, any modification of *Cheng* to supply a permeable coating, as recited in the rejected claims, would change the mode of operation of the reference. For these reasons, any such modification would not have been obvious to a person of skill in the art.

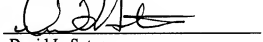
For these reasons, Applicants respectfully request that the obviousness rejection over the combined *Matharu*, *Bühler*, *Moekel*, and *Cheng* references be withdrawn.

CONCLUSION

For the reasons discussed above, Applicants submit that claims 31, 33-49, 53, 55-56, 59, 61-76, 80, 82, and 114-120 are in an allowable condition and respectfully request an early Notice of Allowance. In the alternative, Applicants respectfully request an Advisory Action stating whether the amendments can be entered and the remarks considered at this time. If the Examiner feels it would expedite prosecution, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

Dated: September 30 2009

By: 

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